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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,823	05/14/2002	Leslie Gary Graf	27795-00027	5403

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EXAMINER

BENGZON, GREG C

ART UNIT	PAPER NUMBER
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2144

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/069,823

Applicant(s)

GRAF ET AL.

Examiner

Greg Bengzon

Art Unit

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 May 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 20020221
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This application has been examined. Claims 1-44 are pending.

#### ***Priority***

This application claims benefits of priority from PCT Application PCT/AU00/01070, filed September 8, 2000 and Foreign Application (AUSTRALIA) PQ2741, filed September 9, 1999.

#### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on 02/21/2002 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

#### ***Specification***

This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

#### ***Claim Objections***

Claims 8,14, 18, 20, 22-24, 27-29, 37 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claims 4 and 5. See MPEP § 608.01(n).

Furthermore, Claims 8-29, as being dependent on Claims 1 or 8, are effectively a combination of two distinctly different statutory subject matter, thus forming an improper claim combination.

#### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 8-29 are rejected under 35 U.S.C. 101 because Claims 8-29, as being dependent on Claims 1 or 8, are effectively a combination of two distinctly different statutory subject matter. The combination of two distinctly different statutory subject matter is interpreted to be non-statutory.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. The claim language is not clear as to the subject matter being claimed ('information rate control function means' or 'communication system').

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 30-34, 38-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Kinrot (US Patent 6574193).

Kinrot disclosed Claim 1 - in a telecommunication system having, a core network and a plurality of access nodes in communication with the core network, an information rate control function means adapted to authorise and/or establish a communication rate for transmission of information including: determining means for determining a plurality of maximum information transmission rates along a path of communication established between the plurality of access nodes; (Kinrot – Column 3 Lines 1-5, Column 3 Lines 15-20, Column 4 Lines 10-15) selecting means for selecting a lowest one of the plurality

of maximum information transmission rates, (Kinrot – Column 9 Lines 25-35) and;  
authorising and/or establishing means for authorising and/or establishing  
communication at a rate no greater than the selected lowest rate.(Kinrot - Column 4  
Lines 15-25)

Kinrot disclosed Claim 2 - an information rate control function means as claimed  
in claim 1, wherein the communication rate is dynamically authorised and/or established  
during a communication session. (Kinrot – Column 2 Lines 1-5)

Kinrot disclosed Claim 3 - an information rate control function means as claimed  
in claim 1, wherein the communication rate is authorised and/or established at, or prior  
to, set up of a communication session. (Kinrot – Column 2 Lines 1-5)

Kinrot disclosed Claim 4 - an information rate control function means as claimed  
in claim 1, 2 or 3, wherein the information rate control function means is located in the  
access nodes. (Kinrot – Column 7 Lines 1-5)

Kinrot disclosed Claim 5 - an information rate control function means as claimed  
in claim 1, 2 or 3, wherein the information rate control function means is located in the  
core network. (Kinrot – Column 7 Lines 1-5)

Claims 30-34, 38-44 recite systems, network nodes, and methods for  
implementing said information rate control function. Claims 20-34, 38-44 are rejected  
on the same basis as Claims 1-5, as disclosed by Kinrot .

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Kinrot (US Patent 6574193) in view of ITU-T Recommendation I.366.1 (Segmentation and Reassembly Service Specific Convergence Sublayer for the AAL Type 2) ,hereinafter referred to as ITU-T.

With respect to Claims 6, Kinrot did not disclose implementing the information rate control function over a Service Specific Convergence Sublayer (SSCS) using I.366.2 cells in an ATM network. While Kinrot was concerned with congestion control in ATM networks, Kinrot would have been motivated to look for other disclosures concerning ATM networks, such as ITU-T.

ITU-T disclosed (re. Claim 6) a flow control mechanism that allows an SSADT receiver to control the rate at which the peer SSADT transmitter entity may send information. (ITU-T – Section 9.1) ITU-T disclosed using said SSADT over AAL Type 2 connections as used over various embodiments of an ATM network. (ITU-T – Section 9.1, Section 9.2)

Kinrot and ITU-T are analogous art because they present concepts and practices regarding the implementation of flow control mechanisms over an ATM network. At the time of the invention it would have been obvious to combine the teachings of ITU-T regarding using the SSADT sublayer to implement a flow control mechanism in ATM networks. The motivation for doing so would have been, as ITU-T suggests (ITU-T – Section 1), in order to implement assured data transfer features between nodes in an ATM network.

Claims 7-29, 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinrot (US Patent 6574193), in view of Brueckheimer et al. (US Patent 6574224) hereinafter referred to as Brueckheimer, further in view of ITU-T Recommendation I.366.1 (Segmentation and Reassembly Service Specific Convergence Sublayer for the AAL Type 2) ,hereinafter referred to as ITU-T.

Kinrot disclosed (re. Claim 8-10) wherein the core network is an ATM network using AAL2 Adaptation Layer. (Kinrot – Column 2 Lines 1-5)

With respect to Claim 7, 13, 29 Kinrot did not disclose a rate control mechanism in an RTP Transport layer in an ATM network. With respect to Claims 11 and 28, Kinrot



did not disclose implementing the information rate control function over a Service Specific Convergence Sublayer (SSCS) using I.366.2 cells in an ATM network.

Brueckheimer disclosed (re. 7,13,29) an ATM switch based resource module performing signal processing functions and interworking processed traffic between RTP and AAL1, 2, 5. (Brueckheimer – Figure 7, Column 7 Lines 1-10, Column 8 Lines 10-20)

Kinrot and Brueckheimer are analogous art because they present concepts and practices regarding the implementation of control mechanisms over an ATM network. At the time of the invention it would have been obvious to combine the teachings of Brueckheimer to use RTP Transport Layer mechanisms in ATM networks. The motivation for doing so would have been, as Brueckheimer suggests (Brueckheimer – Column 2 Lines 60-65 ), in order to meet demands of the IP and ATM adaptation layers and the likelihood that both IP and ATM technologies will be deployed in the near term for both real-time and non-real-time services.

ITU-T disclosed (re. 7,11,13,28, 29) a flow control mechanism that allows an SSADT receiver to control the rate at which the peer SSADT transmitter entity may send information. (ITU-T – Section 9.1) ITU-T disclosed using said SSADT over AAL Type 2 connections as used over various embodiments of an ATM network. (ITU-T – Section 9.1, Section 9.2) ITU-T disclosed (re. Claims 11, 28) implementing the

Art Unit: 2144

information rate control function over a Service Specific Convergence Sublayer (SSCS) using I.366.2 cells in an ATM network.

Since Brueckheimer disclosed using AAL type 2 cells work in conjunction with RTP, the combination of Brueckheimer and ITU-T disclosed a rate control mechanism in an RTP Transport layer in an ATM network.

The combination of Kinrot, Brueckheimer combined with ITU-T disclosed (re. Claim 7, 13, 29) wherein the information rate control function means (ITU-T – Section 9.1, Section 9.2) operates in an RTP Transport layer in the core network. (Brueckheimer – Figure 7, Column 7 Lines 1-10, Column 8 Lines 10-20)

Kinrot, Brueckheimer and ITU-T are analogous art because they present concepts and practices regarding the implementation of flow control mechanisms over an ATM network. At the time of the invention it would have been obvious to combine the teachings of ITU-T regarding using the SSADT sublayer to implement a flow control mechanism in ATM networks into the combination of Kinrot and Brueckheimer. The motivation for doing so would have been, as ITU-T suggests (ITU-T – Section 1), in order to implement assured data transfer features between nodes in an ATM network.

Claims 12- 29 and Claims 35-37 recite various well-known embodiments of an ATM networks (i.e. having a maximum transmission rate, air interface, radio networks, cellular networks, fixed access networks).

It would have been obvious to combine the teachings of Brueckheimer and ITU-T into the system and method of Kinrot, in order to enable the ATM network of Kinrot to operate under different types of network infrastructures, such as wireless, cellular and/or fixed access networks. The motivation for said combination would be to increase flexibility and interoperability between ATM networks that operate under different infrastructures and transmission mediums.

Claims 12-29, 35-37 are rejected on the same basis as Claims 7-11, as disclosed by the combination of Kinrot , Brueckheimer and ITU-T.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to the enclosed PTO-892 form.

US 6359863 B1 Varma; Anujan et al. - A method for rate allocation within the individual switches of a communication network implementing a rate-based congestion

control approach for best-effort traffic. The method enables a guaranteed minimum bandwidth to be allocated to each communication session or connection.

US 6047328 A Charny; Anna et al. - intermediate node calculates a rate allocation value for the plurality of virtual circuits, and writes the rate allocation value into the field of the data packet in order to signal to the end station, and any intervening intermediate node, the calculated rate allocation value.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Bengzon whose telephone number is (571) 272-3944. The examiner can normally be reached on Mon. thru Fri. 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (571)272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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